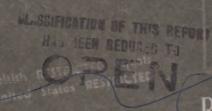
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MEDICAL TARGETS IN SOUTHERN GERMANY

18 to 28 May 1945

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COMBINED INTELLIGENCE OBJECTIVES

SUB-COMMITTEE

MEDICAL TARGETS IN SOUTHERN GERMANY
18 to 22 May 1945

WA 5243

Reported by

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CIOS Target Numbers 24/31, 24/148, 24/159
Medical

COMBINED INTELLIGENCE OBJECTIVES SUB-COMMITTEE G-2 Division, SHAEF (Rear) APO 413

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1. Pharmacology Department.

This department had an enrollment of 400 to 600 students per semester in normal times. The last instruction period ended about 1 March, 1945, but previous damage to the buildings and equipment prevented practical work from being carried out during the winter semester.

Prof. Walther Straub, former head of the department and the leading pharmacologist in Munich, died in October 1944 at the age of 70. He was succeeded by his chief assistant, Dr. A.W. Forst, who was interrogated together with his technical assistant, Fraulein Eugenie Driendl, and his instrument maker or laboratory mechanic, Karl Heuwing.

As regards Prof. Straub's later work, we could find only that he was interested in the use of copper sulphate for phosphorus burns, and narcotine as a substitute for codeine. It was stated that all this work had been published.

In addition to teaching, one of the chief functions of the department was the standardization of digitalis and strophantin preparations. This work was originally shared by Berlin, Leipzig, and Munich as the result of a government order issued in 1928. Recently, due to the overwork of Berlin and the bombing of Leipzig, this function fell entirely to Munich. Since the occupation, Munich has also ceased to perform this duty.

The methods used were the frog method (animals kept at a constant temperature) and the Knafl-Lenz method of infusion into guinea pigs, with constant observation of the electrocardiographic changes. The firms for which standardization was performed included Merck, Ysatfabrik in Wernigerode, Hageda in Berlin, etc. A small amount of private work had also been done for the Luit-poldwerk of Munich on the toxicity of syptics, one of which was an alcohol-ether extract of lung called Clauden (also used clinically by Prof. Dr. Stepp, see below).

Dr. Forst's private scientific interests revolved principally around the autonomic nervous system in relation to sleep, following largely on the ideas of Hess of Zurich. Dr. Forst stated that no work of military significance had been undertaken and that no new classes of synthetics had been studied.

The department has been largely wrecked; all that is left being the lecture theater (slightly damaged) and a practical chemical laboratory, at present without water or gas. The equipment for the testing of digitalis and strophantin had been evacuated to Tutzing, about 25 miles south west of Munich.

2. Medical Clinic

Prof. Dr. Wilhelm Stepp, the Director, was interrogated. His interests have been mainly in the field of vitamin therapy. In addition to his discussion of the Vitamin B complex and his advocacy of its use as a whole, he mentioned particularly the successful use of pantothenic acid in doses of 50 to 100 mg. daily by injection or by mouth in a limited number of cases of chronic bronchitis. He also suggested the study of its use in pneumonia. His supplies of pantothenic acid came from Hoffmann-LaRoche at Grenzach. He also mentioned the use of nicotinamide in chronic gastroenteritis and colitis.

In 1944 Stepp lectured in Spain and Portugal on rational vitamin therapy.

He mentioned that the incidence of polyneuritis had greatly increased in the Munich area, particularly since 1939, especially among adults. Diphtheritic polyneuritis had also increased.

Stepp expressed an active interest in the employment of citrin in hemorrhagic diathesis and hemorrhagic retinitis, and mentioned favorable clinical results. He had no knowledge of any methods for the standardization of citrin. In these conditions he often used Vitamin C and K in conjunction with citrin. The citrin was supplied by I.G. Farbenindustrie. The gold compound, Solganal, is still being used in arthritis.

He maintained that the blood substitute "Periston" was giving good results, and stated that no liver damage had been observed. A few persons out of a group of 18 patients who had recently been sent to the clinic from Dachau were receiving Periston. He volunteered the information that "he had had no idea of the condition of affairs at the Dachau camp, but had been under the impression that prisoners were employed on cultivation of medical plants, under good conditions of sunlight and air."

Stepp referred to a stringent shortage of the purine alkaloids in Germany. He also mentioned the new (6th) edition of <u>Die Vitamine</u> by Stepp, Kuhnau, and Schroeder, published in 1944 by Enke at Stuttgart. Stepp stated that Prof. Hans Fischer had recently committed suicide.

Anatomy Department - Division of Experimental Biology. Prof. Benno Romeis was not seen, as he had been evacuated from Munich to Diessen (am Ammersee). A copy of his book Blutgefäss-und Lymph-gefässapparat innersekretorischer Drüsen, Dritter Teil. Innersekretorische Drüse II Hypophyse; Springer, Berlin, 1940, was examined, It was well documented and illustrated, but contained no matters of interest with regard to glandular preparations. Prof. Bauer, who was the only staff member present, stated that the normal complement of students in the anatomy school was approximately 600.

4. Dermatology Department

The head of the department, Dr. Julius Mayr, was absent at Starnberger See, and we interrogated his deputy, Dr. Hans Otto Munsterer. He has been interested in vaccinal immunity in rabbits, but this work stopped during 1941 because of a lack of food for the animals. He reported that there had been relatively little occupational disease in the area, the main ones reported being cases of dermatitis due to light metals and hydrocarbon oil. Among out-patients a great increase in the incidence of pyodermia had been encountered. This condition was treated mainly with sulfonemides, particularly sulfathiazole. The sulfonemides have been in very short supply, and practically unobtainable recently. There has also been a scarcity of the salvarsans, but the supply of bismuth was adequate. In the treatment of syphilis, practically no cases of jaundice were encountered, and on inquiry it was found that the syringes were boiled for each case. The incidence of syphilis in the war years was said to have increased more than tenfold. Dr. Munsterer stated that he had found a considerable incidence of venereal disease among foreigners in the area, except among the Russians.

Scabies had increased. The preferred treatment was with "Mitigal". Benzyl benzoate was irritant and less effective.

It does not appear that the civilian population has benefited directly from any advances in military medicine. It seems that drugs in short supply were reserved for the German Army.

5. Psychiatric Clinic.

Prof. O. Bumke was visited in the Psychiatry Clinic in the Numberg Strasse. He was very cooperative and gave us a rapid summary of the work in his department. He, himself, had done little or no scientific research during the war. During this period however he had brought out the 6th edition of his Lehrbuch der Geisteskrankheiten, which is basically the same as the 5th edition. The introduction to the 5th edition contained the following: "In der funften Augflage ist neu eingefügt worden die Insulin - Cardiazol - und Elektroschockbehandlung. Mit Rücksicht auf neue Gesetze ist der Abschnitt 'Der Staat und die Geisterkranken' erheblich verändert worden. Die Auseinandersetzung mit der Psychoanalyse ist fortgefallen". This was written in August 1941. Prof. Bunke has also written a psychological work, Gedanken über die Seele (Reflections on the Psyche) Verlag Springer, of which there have been several printings, but a copy of this was unobtainable. He said it was psychological and philosophical in content. Since autum 1940 he had not been able to do any research because of his numerous clinical

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Bannwarth, who had to go through the formality of joining the S.S. Bannwarth had written a monograph Über entzündliche Erkrankungen des Nervensystems. (Inflammatory Diseases of the Nervous System). Among the subjects treated was inoculation polyneuritis. Because of acid. This worker apparently specialized in roentgenography One of Bumke's former colleagues in the Kaiser Wilhelm Institut, of the brain. This was published about 1941 by Springer. Berlin. Prof. Beck is now at Tutzing, working in a Beobachtungslazarett. this worker was shot by the S.S. about the time that the Americans been implicated in the Bavarian freedom movement. Prof. Bumke was of the opinion that biochemical studies of metabolism in insanity or perhaps a book (we were not quite certain), on Psychogenische Storungen bei Kriegsteilnehmer, (Psychogenic Disturbances among Servicemen), had been written by D. Ziehen, another of Prof.

No work had been done with the electroencephalograph in Bumke's institute during the war, and apparently no new drug methods had been used, with the possible exception of the administration in schizophrenia of pyramidon, which was scarce at the time of this visit.

II Veterinary Medical School, University of Munich.

The building was found to be in ruins. Due to lack of time it was not possible to seek out and interview former members of the staff of the veterinary school.

III Department of Organic Chemistry, University of Munich.

The Organic Chemistry Department is situated on Sophienstrasse in Munich, in the same block as the other chemistry departments and the departments of zoology and botany. The chemistry building was almost completely destroyed on 17 Dec. 1944. We were able to rescue

The professors of the organic chemistry department were Heinrich Wieland, Ludwig Kalb, Elizabeth Dane and Erich Schmidt.

Prof. Heinrich Wieland was interrogated at his home in Starnberg, south of Munich. He was very cooperative. In 1943 he had been lecturing to 440 second-year organic chemistry students. The abovenamed professors had about 25 to 30 research students working under their direction. Recently some research had been continued in a small emergency laboratory in Weilheim. Throughout the war, Prof. Wieland had continued his work in his own special academic fields and had not done any work directly connected with the war. He had collaborated with the firm C.H. Boehringer Sohn at Ingelheim, and had had a loose connection with the I.G. at Elberfeld.

Wieland's principal interests have been in the fields of the alkaloids, sterols, pterines, and the toxic principle of Amanita phalloides. His most important alkaloid work was on curare. The main source of his material was 5 kilos of British Guiana bark (Strychnos toxifera) which he obtained from Dr. H. King of the M.R.C., Hampstead, before the war. From this material he succeeded in obtaining 30 mg. of a pure crystalline and very toxic alkaloid. One frog unit was found to be less than one gamma. He work was directed to the determination of its structure, but he had not yet brought the work to a conclusion, and his recent results have not yet been published. Boehringer supplied funds in support of this work. A folder of correspondence with individuals in South America, relating to sources of curare, was obtained for microfilming.

Dr. Wieland had also continued his work on the strychnine constitution problem, and on the indole alkaloids. In the sterol field he had been supplied by Boehringer with the mother liquors of ergosterol from yeast, and obtained a hydrocarbon lower than squalene, the constitution of which had not yet been worked out.

Most of Wieland's publications on these subjects have appeared in Liebig's Annalen, and the following reprints were salvaged:

"Uber Strychnos-Alkaloide

Part 22 Wieland and Müller, Ann., 545, 59-71 (1940)
Part 23 Wieland and Schmaus, Ann., 545, 72-85 (1940)
Part 24 Wieland and Jennen, Ann., 545, 86-98 (1940)
Part 25 Wieland and Jennen, Ann., 545, 99-112 (1940)
Part 27 Wieland and Thiel, Ann., 550, 287-300 (1942)
Part 28 Wieland and Weisskopf, Ann., 555, 1-9 (1943)
Part 29 Huisgen and Wieland, Ann., 555, 9-25 (1943)

Harnsaure und Hypoxanthin als Pigmentbestandteile der Flügel von Pieriden.

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"ber Flügelpigmente der Schmetterlinge

Part 6 Wieland and Purrmann, Ann., 544, 163-182 (1940)
Part 8 Wieland and Tartter, Ann., 545, 197-208 (1940)
Part 9 Wieland, Tartter and Purrmann, Ann., 545, 209-219
(1940)
Part 11 Wieland and Decker, Ann., 544, 180-184 (1941)
Part 12 Purrmann, 548, 284-292 (1941)

Die Nebensterine der Hefe

Part 8 Wieland, Rath and Hesze, Ann., 548, 34-49 (1941)
Part 9 Wieland and Coutelle, Ann., 548, 270-283 (1941)
Part 10 Wieland and Benend, Z. physiol. Chem. 274
215-222 (1942)
Part 11 Wieland and Benend, Ber., 75, 1708-1715 (1942)
Part 12 Wieland and Benend, Ann., 554: 1-8 (1943)

"ber die Alkaloide aus Calebassen - Curare, Part IV, Wieland, Baehr and Witkop, Ann., 547, 156-179 (1941)

"ber die Giftstoffe des Knollenblätterpilzes, Part VI, Weiland and Hallermayer, Ann., 548, 1-18 (1941)

"ber Krotengiftstoffe, Part XI, Wieland and Behringer, Ann., 549, 209, 237 (1941).

Uber das Auftreten freier Radikale bei chemischen Reaktionen, Part X, Wieland and Meyer, Ann., 551, 249-258 (1942)

Uber den Mechanismus der Oxydationsvorgunge, Part 52, Wieland and Jennen Ann., 548, 255-270 (1941) Part 53, Wieland and Rosenthal, Ann., 554, 241-260 (1943)

IV State Bacteriological Laboratory (Staatliche bakteriologische Untersuchungsanstalt), München, Schillerstr. 25, and State Hygiene Institute (Staatshygienisches Institut), Pettenkofer Strasse 35.

State Bacteriological Laboratory, Directory Dr. Willi Rimpau.

This Institute in normal times performed the general bacteriological work required by the area bounded by the Danube River, Lake Constance, Ulm and Berchtesgaden. It had 4 medical bacteriologists one of them the director, some 13 technical assistants, 8 typists and 9 clerks to carry on the work. The Institute has been largely destroyed by bombing, however, and Dr. Rimpau is at present trying to start again on two floors of a former S.A. home, but this will require official sanction and funds. If he can get started he has about six months supply of media with which to work. He also mentioned the desirability of setting up some clinical chemical assistance for clinicians. The following reprints were obtained from Dr. Pimpau:

- W. Rimpau: Epidemiologische Probleme bei Feldfieber, Der Öffentliche Gesundheitsdienst 7 259-265 (1941)
- 0. Gsell & W. Rimpau: Endemisches Feldfieber in der Schweiz, Munch. Med. Wochen. 1944, Nr. 9/10, p. 117
- 0. Gsell & W. Rimpau: Feldfiebermeningitis in der Schweiz, Schweiz. Med. Wochen 74 51-59 (1944)
- W. Rimpau: Ueber Leptospirose bei den Muriden (mäuseartigen Nagern), Z.f. Bakt., Parasit., Infektionskr. 1. Abt. Originale 150 136-149.
- W. Rimpau: Systematische Untersuchungen von Feldmäusen auf Leptospiren, Münch. Med. Wochenschr. 1943, Nr. 3, 348.
- W. Rimpau: Systematische Untersuchungen von Feldmäusen auf Leptospiren, Münch. Med. Wochschr. 1942, Nr. 47, p 991.
- W. Rimpau: Endemische Feldfieberherde mit mehreren Arten von Leptospiren, Wien. Med. Wochen, Nr. 38, 1940.
- W. Rimpau: Die Leptospirosen, insbesondere das Feldfieber, Sonderdruck aus Die ansteckenden Krankheiten, von Max Gundel, 3 Aufl. Georg Thieme Leipzig, 1944.
- W. Rimpau: Uber Aggutination und I ysis bei Leptospiren. (Feldfieber A), Zentralbl. f. Bakteriologie, Parasitenk, u. Infektionskr., 1 Abt. Originale 149 65-74, (1942).

The above references show the type of work in which the laboratory was engaged.

State Hygiene Institute, Pettenkofer Strasse 35, Director Prof. K. Kisskalt.

The institute was very badly damaged. The director, Prof. K. Kisskalt, had already been seen by Captain Augustine. During our interrogation we were shown the method that had been started in an attempt to avoid using agar with Petri dish cultures. Use was made of the sheets of filter paper soaked in bouillon stained with fuchsin, covered with a disk of cellophane, and then sterilized. This method was used in the examination of fecal samples. Work had also been started with Penicillium notatum, but had not gotten very far. They

had a considerable number of cultures giving varying yields, and had worked with a company named Mack, in Illertissen. There was nothing of further interest for us.

V Bavarian Institute for Occupational Medicine, Munchen, Ludwigstrasse 22B.

This Institute was completely gutted and we were unable to trace its Director, Dr. Franz Koelsch; the address left at the old Institute was now a military headquarters. A copy of an article: F. Koelsch, Arbeit und Haut (Arbeitsmedizinische und hautphysiologische Erwägungen an Hand vierjahriger Forschungsergebnisse bei beruflichen Dermatosen), Arbeitsmedizin H. 18. 1944 (2nd Edition) was obtained.

I BIOLOG. -CHERISCHES FORSCHUNGSLABORATORIUM - F.E. FREITAG

The laboratory is in two buildings in the village of Freudental, near Konstanz. It is a private institution with funds derived from several sources, namely (a) royalties on Freitag patents, (b) grants from the firm of Lomberg G.m.G.H., the holding company of Bykopharm, Frankfurt-am-Main, and (c) private contributions.

The amount spent in 1944 was 70,000 - 80,000 marks. Freitag had 5 qualified assistants, and in addition about a dozen laboratory assistants. He present work is in the field of biological chemistry. He claims to have evolved a purely physical, in vitro method for the measurement of anti-coagulant activity, using the gelling of a synthetic sol as an indicator. In attempts to find a satisfactory anticoagulent he examined the sulphuric acid esters of cellulose, chitin, denatured collagen and a carbohydrate fraction from Chondrus crispus (Iceland moss). No completely satisfactory substance has been found. He studied under Jorpes in Stockholm for three weeks in March 1944, and at present with Dr. Frank, of Neustadt in the Black Forests is trying to evaluate heparin in the prevention of thrombosis.

VII Hygiene Institute, University of Tubingen Silcherstrasse 7.

Professor Otto Stickl is the director of the Hygienisches Institut of the University of Tubingen. This institute is commend with academic teaching and research, and does the routine bacter plogical testing for the Wurttemberg area. As many as 70-80,000 tests are performed per annum. The institute appeared to be well equipped, but Professor Stickl reported that some ten days previously the Prench authorities had removed his electron microscope, some photographic apparatus, and his experimental protocols. Other apparatus including an ultra-centrifuge still remained.

Professor Stickl's main interests have been in the following fields: Sulphonamides. He had been examining in mice the effects of the sulphonamides on intestinal and dysentery organisms, particularly with regard to the distribution of the drugs in the various

body fluids, and the nature of their action on the bacteria. No outstanding results were reported to us. It was interesting that while he had examined Globucid, Pyrimal, Albucid and sulphapyridine, that Globucid and Pyrimal were about equally effective (ne work on penicillin had been done).

Epidemic Hepatitis. Professor Stickl had investigated a number that had no experience with hepatitis occurring after injection of serum. Detailed protocols were not in Professor Stickl's possession.

Dibromosalicil (Preparation No. 236/27). A sample of 3:3'dibromosalicil had been supplied to Professor Stickl by Professor R.
Kuhn of Heidelberg. The toxicity and chemotherapeutic activity of
this substance against a fatal staphylococcus infection in mice
had been investigated by one of Stickl's students (H. Cienger) in
a "Doktor-Arbeit". Whereas Kuhn claimed that 50 mg. daily, either

administration of 5 mg. by intraperitioneal injection. Lower doses
occasionally lengthened or saved the life of an infected mouse, but
dibromosalicil was less effective than Globucid. In the mouse it
was three times as toxic as Globucid. Professor Stickl saw no
future in this compound for staphylococcal infections. The compound
used in these tests was not dibromosalicil alone, but the boric
acid complex made for purposes of solubilization.

Professor Stickl's department has done no work on tetrachlor-osalicil.

Publications from the Hygiene In Litute, 1940-1944.

von Bacterium coli im Trinkwasser. Diss 1939
Zeitschr.f.Hyg., 122, 611, 1940.

Weller, Erich: Tetanus und Umwelt. Unter besonderer Berücksichtigung der regionalen Verschiedenheit des Tetanusvorkommens. Diss. 1939.

Burkhard, Elic Una Leaphotograph von Sokmatonkolonien en infraroten Licht.

Diss. 1939.

oberfläche fester Nährböden (Plattenmanipulator),
Vierthaler, R: Zbl. Bakt. Orig.I, 129, 1939.

Koblauller, L. Untersuchunger Über Streptokokken.
I. Mitteilung: Über bewegliche Streptokokken,
Zbl. Bakt. Orig.I 133, 1939.

Koblinüller, L. Über unterschiedliche Vermehrungsfähigkeit bei Nachkommen einer Subtilisspore, Zbl. Bakt. Orig. I; 140,1937.

Ertner, Kurt Fierexperimentelle Erfahrungen mit Eubasinum, Dtsch. med Wschr., 22, 600, 1940.

Stickel, Otto Aussichten der Sulfonamidbehandlung der Ruhr auf and Grund experimenteller Untersuchungen,
Dtsch. med. Wschr. 20, 509, 1942.

Klaiber, R. Untersuchungen über die Entwicklung der Diphtheric in Deutschland unter besonderer Berücksichtigung der württembergischen Verhältnisse.

Tillmann, Bestimmung der Sulfonamidkonzentration in Stuhl Rottger und Urin unter Berücksichtigung verschiedener Praparate. Diss. 1941.

Lassen sich Ruhrtoxine durch Sulfonamide beeinflussen? Diss. 1942.

Rohricht, W. Über die Übertragung von Krankheiten durch Nahrungsmittel unter besonderer Berücksichtigung des
Aufgabenbereichs des Hygienikers der Kriegsmarine
in den besetzten Gebieten Frankreichs.
Diss. 1943.

Moritz, W. Über die Möglichkeiten der Sulfonamidtherapie in der Hals-, Nasen-und Ohrenklinik (nach Erfahrungen t. 31 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822 | 1822

Vieckau, Helmut Sulfonamidbeeinflussung der normalen und pathogenen
Darmflora unter besonderer Berücksichtigung der
durch Antagonismus und Bakteriophagen bedingten
Einflüsse. Diss. 1943.

unger, dorge Über die Beeinflussung spezifischer Immunkörper durch Sulfonamide, Zeit, f. Immun. forschung 103, 5, 1943. Gartner, Kurt Die Sulfonamideinwirkung im Lichte der Fluoreszenz und Elektronenmikroskopie, Zeit. Bakt. Orig., 150, 1943.

Ein Beitrag zur Färbbarkeit der lebenden und toten
Bakterienzelle. Gleichzeitig eine Mitteilung uber
die Bakterienstruktur und deren chemotherapeutische
Beeinflussbarkeit,
Zeitschr. Hyg. 125, 226, 1943.

Stickl, Otto Die Wirkungsweise der Sulfonamide und ihre chemotheraand peutische Anwendung bei Ruhr, Gärtner, Kurt Zeitschr Hyg. 125, 226, 1943.

Gärtner Kurt Über eine neuartige paratyphusähnliche Krankheit and nach Enteneigenuss mit Erregernachweis im Blut.

Yestenhöfer, O. Sulfonamidwirkung auf Bakterien, Toxine im Tierversuch, Klin. Wschr., 29/30, 1944.

Glenk. M. Die Sulfonamidwirkung auf bakterienfreie Ruhrtoxine im Tierversuch.

Diss. 1944.

Rechenbach E. Übersicht über die Chemotherapie bei Typhus und Paratyphusbazillenausscheidung.

Diss. 1944.

Murthum, E. Die Sulfonamidwirkung auf Bakterientoxine im Tierversuch. Diss. 1944.

van der Wall, E. Chemotherapeutische Wirkung von Sulfonamiden auf Typhus unter Verwendung der bei einer Typhusepidemie gemachten Erfahrungen. Diss. 1944.

Schwalbe, H. Bekämpfung einer Typhusepidemie mit Sulfonamiden.
Diss. 1944.

Jackle, Erich Kritischer Vergleich bekannter Methoden lebende und tote Bakterien farberisch zu unterscheiden, erganzt durch elektronenoptische Aufnahman.

Diss.

Stickl, Otto Die Wirkung der Sulfonamidbehandlung während einer and Typhusepidemie,
Gärtner, Kurt Münch. med Wschr. 33/34, 441, 1944.

Schöllhammer, Paul Physikalische Beeinflussbarkeit von bakteriellen Toxinen. Diss. 1944.

Kürzdörfer, Heidi Ein Beitrag zum Mechanismus der vitalen Acridinorngae-Fluoreszenwirkung.
Diss. 1944.

Schmidt-Ramsin, D. Versuche uber die bakterizide und sporentötende Wirkung von in Aethanol gelösten höheren Alkoholen. Diss. 1944.

Hager, H. Die Wasserentseuchungsmittel Mikropur 60 und Mikropur 1000 in ihrer Abhängigkeit von Temperatur, Keimzahl und Einwirkungsdauer. Diss. 1944.

Schmidt, H. Tierexperimentelle Versuche mit der Kombination einer Metall-Sulfonamidwirkung und einer Acridin-Sulfonamidverbindung.

Diss. 1944.

Marcinowski, Gernot Die Beeinflussung der Wirksamkeit der Wasserentseuchungsmittel Micropur und 60 Micropur 1000 durch
den Gehalt des Wassers an organischer Substanz.
Diss. 1944.

Pecina, J. Beeinflussung der Agglutininbildung durch physikalische Einflusse.

Diss. 1944.

Liebheit, Klaus

Das Problem des Diphtheriebazillenträgers unter besonderer Berücksichtigung der bisher angewandte Behandlungsmethoden.

Diss. 1944.

Finger, Georg Probleme der Poliomyelitis-epidemiologie.
Habilitationsarbeit 1944.

VIII Department of Pathology, University of Freiburg.

Professor Franz Buchner, the director of the department was visited on 27 May 1945 at his home, Holbeinstrasse 32, Freiburg im Breisgau. He was very cooperative and gave us an account of the work of his department in considerable detail. The work he had done during the war was really an extension of his interests on the effects of oxygen deficiency on the heart muscle. In 1939, he had published a book on coronary insufficiency, Die Koronarinsuffizienz., Steinkopf, Dresden u. Leipzig. He observed that severe suffocation, CO poisoning, severe anaemia, and exposure to low levels of oxygen pressure were followed by a punctate necrosis in the cardiac muscle

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and that this was accompanied by a deformation of the S-T complex of the electrocardiogram. He extended these experiments and showed that guinea pigs exposed to low oxygen pressure which finally proved fatal showed varying degrees of ganglion cell necrosis in the central nervous system, especially the medulla oblongata. In 1942 Altmann and Schubothe in an article entitled "Funktionelle und organische Schädigungen des Zentralnervensystems der Katze im Unterdruckexperiment," Beitr. zur path. Anat. u zur. allg. Path. 107: 1-116, 1942, showed that in cats the areas of the brain which were sensitive to oxygen lack, as shown by histological examination, were those areas which showed electroencephalographic changes under the same conditions.

Professor Buchner also remarked that in advanced cases of blood loss similar histological changes were found post mortem. In reply to a question as to whether Periston had been used to any considerable extent in cases of severe haemorrhage, he told us that as a result of his experiments Professor Lang, the head of the Physiologisch-Chemisches Institut der Militärärztlichen Akademie in Berlin had recommended the use of serum and apparently had also organized this. In ther subject which interested his department was the effect of chilling and low temperature in relation to the body glycogen. Prolonged exposure to cold causes the disappearance of the cardiac glycogen. The effects of cold and other noxious agents on the lipoid content of the suprarenals have also been investigated. The lipoid content of the suprarenal is most sensitive to attack. A considerable amount of work on infectious hepatitis has likewise been done and a manuscript by Kuhn, one of his assistants, is awaiting publication. The manuscript appears to be well illustrated. Although it was not possible to go through it in any detail, mention is made here of its existence in case it may be of interest. Buchner mentioned that he had come across a very rare sequela to infectious hepatitis, namely cirrhosis.

Organization of the Laboratory

Professor Buchner stated that most of his staff had really on with him before the war but a Pathological Sectionwas formed in his laboratory by the Air Ministry, and by this means he was able to keep his staff together during the war. Thus, he had four assistants for the Air Ministry section of his work and only one so-called civilian assistant. The work carried on under the auspices of the Air Ministry was mainly a continuation of his general type of research. The following list of his present staff was obtained:

- 1. Dozent Dr. G. Liebegott.
- 2. Dr. G. Veitly (Army Pathologist P.W. in Italy).
- 3. Dr. H. J. altmann (St. Blasien)
- 5. Dozent Dr. G. Peters (St. Blassien)=
- 6. D.J. Pidrotka (Brannenburg a. Inn).
- m Located there since the laboratory was destroyed.

Dr. H.J. Staudinger (in Freiburg)

After the raid of 27/11/44 a part of the laboratory was left, but the chemical section was completely destroyed. Nevertheless, it had been possible to rescue most of the books and apparatus from the cellars, where they had been put for safety.

Reprints of the work of the department for 1943-44 were obtained in two volumes entitled respectively Arbeiten aus dem Ludwig Aschoff-Haus, 1943-44, and Arbeiten aus dem Institut für Luftfahrt-medizinische Pathologie des Reichsluftfahrtministeriums, Freiburg i. Br., 1943-44.

The subjects treated under these headings overlap considerably. The articles which Dr. Büchner considered as presenting the best summaries of his general teachings were (No. 2 in the Ludwig Aschoff-Haus volume), namely, "Die pathogenetische Bedeutung des allgemeinen Sauerstoffmangels," which is still in press and No.11, in the same volume, namely: Beitrag zum Problem der Chemorezeptoren." Both these articles also appear in the second volume so that it looks as if the Air Ministry Section might have been a means of retaining assistants.

During the interrogation of Professor Buchner he informed us that Professor Dr. 3. Janssen, Professor of Pharmacology, Freiburg, Sonnhalde 14, had continued his work on the various fractions of the pituitary, but had had very few assistants during the war and had done no pharmacological work for the German Government. Therefore, in view of the short time available, he was not interrogated.



War Dept., Combined Intelligence Objectives.

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